# A NEW SPECIES OF THE GENUS *SINOENNEA* FROM JIANGXI, CHINA (PULMONATA, STYOMMATOPHORA, STREPTAXIDAE)

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**Abstract** A new species of the genus *Sinoennea* is described in the present paper. The materials were collected in Jiangxi Province, China in 2011 by the authors. Type specimens are deposited in the College of Life Sciences and Food Engineering, Nanchang University, Nanchang and the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

***Sinoennea longtanensis* sp. nov.** (Figs 1 – 5)

Holotype, alt. 3.50 mm, diam. 1.80 mm, alt. of aperture 1.24 mm, diam. of aperture 1.13 mm, collected from Longtan scenic spot, Jinggangshan City (26°35′N, 114°08′E), Jiangxi Province, China, 2 July 2011.

Paratypes 9 specimens, alt. 3.24 – 3.60 mm, diam. 1.75 – 1.96 mm, alt. of aperture 1.00 – 1.29 mm, diam. of aperture 1.03 – 1.29 mm, collected with the holotype.

Shell small, thick, solid, cylindrical. Apex blunt. Shell milk white or light yellow in colour, glassy transparent, with shining shell surface. Suture distinct and deep. Whorls $6\frac{1}{2}$, moderately convex with high spiral part. Top two whorls smooth, following ones with vertically, equally spaced ribs, about 26 – 27 on the last whorl, visible only at suture. Shell surface smooth thoroughly. Columella visible on the last whorl. Aperture small, triangle. Peristome thick, expanded and reflexed. Inner lip with callus and a big flake-shaped curving and angular lamella. Outer margin the peristome beard two nipple-formed palatal teeth: the smaller one lies at the upper edge of peristome, the large one deeper down at bottom of peristome. Columellar lip vertical, with two columellar teeth, one small nipple-formed tooth at the peristome edge, a second large nipple-formed tooth somewhat lower down. Basal tooth small. Umbilicus small, cavernous.

The new species resembles *Sinoennea pupoidea* Zhou, Zhang and Chen, 2009, but differs from the latter by the shells with $6\frac{1}{2}$ whorls (alt. 3.50 mm, diam. 1.80 mm, alt of aperture 1.24 mm, diam. of aperture 1.13 mm) and the small, triangle-shaped aperture. At the columellar side there are two columellar teeth and one small basal tooth. But the latter shell with $5\frac{1}{2}$ whorls (alt. 2.94 mm, diam. 1.68 mm, alt of aperture 0.57 mm, diam. of aperture 0.57 mm) and small, elliptical-shaped aperture. At the columellar side there is one columellar tooth, without the small basal tooth.

Etymology. The name of the new species is based on the type locality Longtan scenic spot, Jinggangshan City.

Geographical distribution of *Sinoennea longtanensis* sp. nov. is showed in Fig. 6.

**Key words** Pulmonata, Styommatophora, Streptaxidae, *Sinoennea*, new species.

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This research was supported by National Natural Science Foundation of China (30860045, 30460023); Academic Leaders of Jiangxi Province (2003-154); Beijing Forestry University "985" Project for Outstanding Disciplinary Construction. (国家自然科学基金 (30860045, 30460023); 江西省主要学科学术和技术带头人项目 (2003-154); 北京林业大学 985 优势学科建设平台项目资助)

Received 18 Aug. 2011, accepted 22 Dec. 2011.

# 江西弯螺属一新种记述（肺螺亚纲，柄眼目，扭轴蜗牛科）

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**摘 要** 在整理江西地区陆生贝类标本时，经比对鉴定发现1新种，龙潭弯螺 *Sinoennea longtanensis* sp. nov.，隶属肺螺亚纲、柄眼目、扭轴蜗牛科、弯螺属。对新种形态特征、栖息环境作了记述，并与其近似种进行讨论。

**关键词** 前鳃亚纲，柄眼目，扭轴蜗牛科，弯螺属，新种.

**中图分类号** Q959.212.5

扭轴蜗牛科 Streptaxidae 弯螺属 *Sinoennea* 系 1904 年由 Kobelt 建立。该属特征为：贝壳小型，呈卵圆形-圆柱形，壳口上常具有 1 短粗的角板和 2 ~ 4 枚齿。齿舌狭窄。主要分布于东亚和南亚和我国长江流域以南地区（Thiele, 1931），目前在我国报道 12 种（Gredler, 1881；1885；Moellendorff, 1881；1882；1885；1887；Heude, 1882；Yen, 1939；罗泰昌等, 1998；2004；周卫川等, 2006；2009）。

**龙潭弯螺，新种 *Sinoennea longtanensis* sp. nov.**（图 1 ~ 5）

正模标本 壳高 3.50 mm，壳宽 1.80 mm，壳口高 1.24 mm，壳口宽 1.13 mm，标本采自江西省井冈山市龙潭景点（26°35′N, 114°08′E），2011 年 7 月 2 日。副模标本 9 个，壳高 3.24 ~ 3.60 mm，壳宽 1.75 ~ 1.96 mm，壳口高 1.00 ~ 1.29 mm，壳口宽 1.03 ~ 1.29 mm。

正模标本及一部分副模标本保存于南昌大学生命科学与食品工程学院标本室，另一部分副模标本保存于中国科学院动物研究所标本馆。

形态特征 贝壳小型，壳质厚，结实，呈圆柱形，壳顶十分钝，壳面为乳白色或淡黄褐色，透明有光泽，缝合线深，呈锯齿状。有 6 $\frac{1}{2}$ 个螺层，各螺层均匀增长，膨大，螺旋部高，壳顶 1 ~ 2 个螺层光滑，无肋纹，其下各螺层壳面具有稀疏成纵行排列的肋纹。体螺层壳表面呈光滑透明状，可见壳内螺轴，体螺层不膨大，靠近壳口处逐渐变窄，缩小；具有 26 ~ 27 条肋纹，仅在缝合线处明显。壳口狭小，呈三角形，口缘厚，外翻。壳轴垂直，壳口内唇上有 1 枚较大、弯曲的、呈片状的角板，内唇贴覆于体螺层上形成稍厚的胼胝部；外唇口缘有 2 枚乳头状齿，其中 1 枚较小，位于壳口表面，另 1 枚较粗壮，在壳口底部稍深的位置。轴缘处有 2 枚乳头状轴缘齿，其中 1 枚较小于壳口边缘处，另 1 枚非常发达于壳口较深处；壳口轴唇上有 1 枚较小的乳头状基齿。脐孔小，呈孔隙状。

栖息环境 一般生活在海拔 900 ~ 1 000 m 阴暗潮湿多腐殖质山区，常栖息于阔叶林下的石壁上或其缝隙中，附着在落叶或腐败枯枝上。

词源：新种种名源于本种的采集地。

讨论 新种与蛹形弯螺 *Sinoennea pupoidea* Zhou, Zhang *et* Chen, 2009（周卫川等, 2009），在外部形态上相似，但较后者大，新种有 6 $\frac{1}{2}$ 个螺层（壳高 3.50 mm，壳宽 1.80 mm，壳口高 1.24 mm，壳口宽 1.13 mm），壳口狭小，呈三角形，在轴缘处有 2 枚乳头状轴缘齿，在轴唇上有 1 枚较小的乳头状基齿。但后者有 5 $\frac{1}{2}$ 个螺层（壳高 2.94 mm，壳宽1.68 mm，

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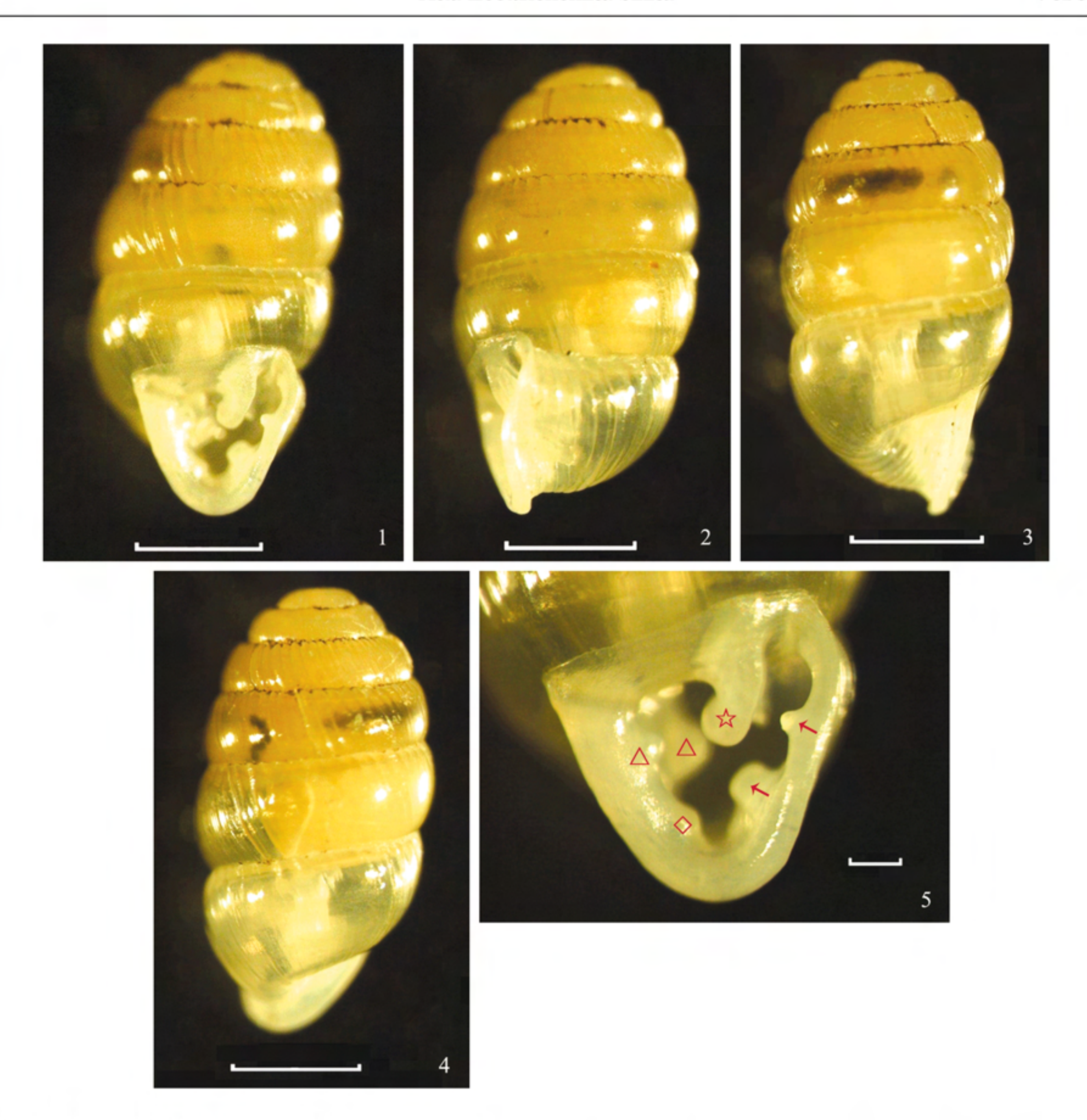



图 1 ~ 5　龙潭弯螺，新种 *Sinoennea longtanensis* sp. nov.

1. 贝壳侧面观（lateral view of shell）2. 贝壳右侧面观（right lateral of shell）3. 贝壳左侧面观（left lateral of shell）4. 贝壳背侧面观（dorsal lateral of shell）5. 壳口放大（aperture enlarge）☆ 角板（angular lamella）⇨ 外唇齿（palatal teeth）△ 轴缘齿（palatal teeth）◇ 基齿（basal tooth）比例尺（scale bars）：1 ~ 4 = 1 mm，5 = 0.2 mm

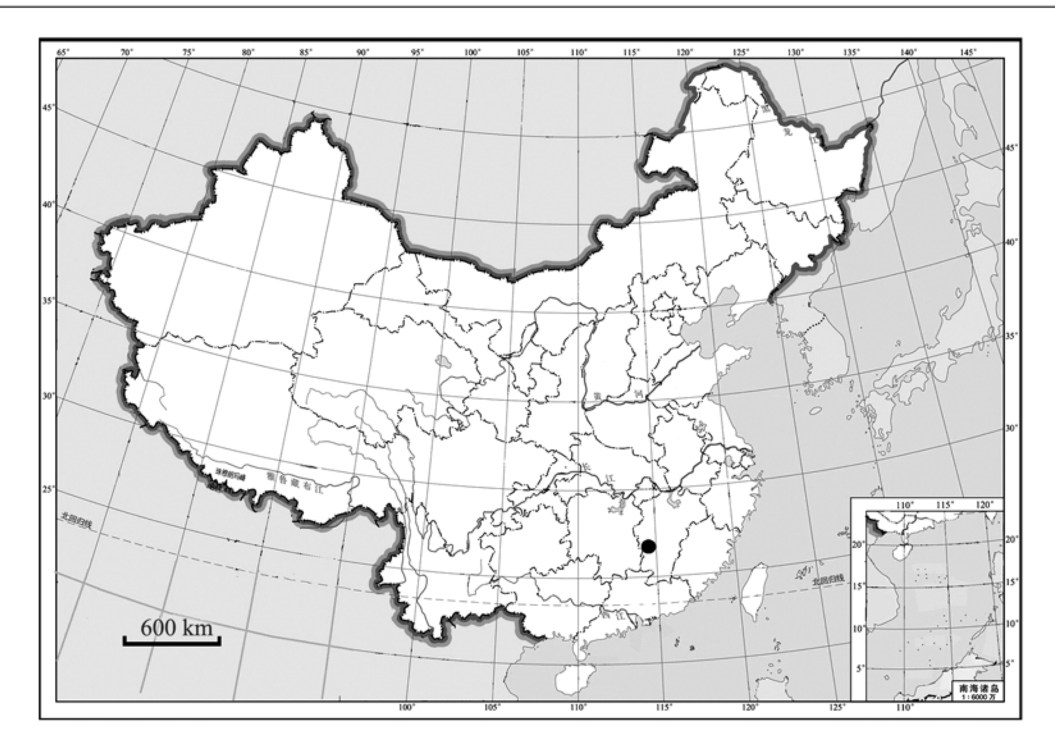



图6　龙潭弯螺新种地理分布（●）

Fig. 6. Geographical distribution of *Sinoennea longtanensis* sp. nov. (●)

壳口高 0.57 mm，壳口宽 0.57 mm），壳口狭小，呈椭圆形，在轴缘处仅有 1 枚乳头状轴缘齿，在轴唇上无基齿。故而有所区别。

模式标本采集地点如图 6 所示。

**致谢**　在此特别感谢中国科学院动物研究所陈德牛研究员、台湾大叶大学黄重期博士帮助鉴定标本。

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